CLAIMS

1. A monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26.

2. The monoclonal antibody of claim 1 wherein said antibody is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303, and 108-394.

3. A hybridoma cell line which secretes a monoclonal antibody which binds to a shared epitope Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26.

4. The hybridoma cell line of claim 3, wherein said cell line is selected from the group consisting of A.T.C.C. Deposit No. HB _____, A.T.C.C. Deposit No. HB _____, A.T.C.C. Deposit No. HB _____, A.T.C.C. Deposit No. HB _____, A.T.C.C. Deposit No. HB _____, and A.T.C.C. Deposit No. HB _____.

5. A method for detecting the presence of one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing one or more of said antigens, comprising the steps of: a) contacting said test sample with at least

one monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of antibody/antigen complexes; and

b) detecting said complexes, presence of said complexes indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in said test sample.

6. The method of claim 5 wherein said at least one monoclonal antibody of step (a) is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303 and 108-394.

7. The method of claim 6 wherein said at least one monoclonal antibody of step (a) is labeled.

8. A method for detecting the presence of one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein 24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of antibody/antigen complexes;

b) adding a conjugate to the resulting antibody/antigen complexes for a time and under

conditions sufficient to allow said conjugate to bind to the bound antigen, wherein said conjugate comprises an antibody attached to a signal generating compound capable of generating a detectable signal; and

c) detecting presence of antigen which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen in said test sample.

9. The method of claim 8 wherein said at least one monoclonal antibody of step (a) is selected from the group consisting of 120A-270, 115B-151 117-289, 103-350, 115B-303, and 108-394.

10. The method of claim 8 wherein said antibody of step (b) of said conjugate is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303, and 108-394.

11. The method of claim 8 wherein said at least one monoclonal antibody of step (a) is selected from the group consisting of 120-270, 108-394 and 115B-303, and said antibody of step (b) of said conjugate is selected from the group consisting of 117-289 and 115B-151.

12. The method of claim ~~11~~ wherein said at least one monoclonal antibody of step (a) is 120A-270

and said antibody of step (b) of said conjugate is 115B-151.

13. A method for detecting the presence of one or more antigens selected from the group consisting of HIV-1 antigen and HIV antigen, in a test sample suspected of containing one or more of said antigens, comprising the steps of:

(a) contacting: 1) at least one monoclonal antibody which binds to a shared epitope of HIV-1 p24 antigen and HIV-2 p26 antigen bound to a solid support, 2) said test sample, and 3) an indicator reagent comprising an antibody which binds to HIV-1 antigen and HIV-2 antigen to which a signal generating compound is attached, to form a mixture;

(b) incubating said mixture for a time and under conditions sufficient to form antibody/antigen/antibody complexes;

(c) detecting presence of a measurable signal generating by said signal-generating compound, presence of said signal indicating presence of one or more antigens in said test sample selected from the group consisting of HIV-1 antigen and HIV-2 antigen.

14. The method of claim 13 wherein said at least one monoclonal antibody ~~of~~ step (a) is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303 and 108-394.

15. The method of claim 13 wherein said antibody of said indicator reagent of step (a) is selected

from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303 and 108-394.

16. The method of claim 13 wherein said at least one monoclonal antibody of step (a) is 120A-270 and said antibody of said indicator reagent of of step (a) is 115B-151.

17. A kit for determining the presence of one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen in a test sample comprising: (a) at least one monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26; and (b) a conjugate comprising an antibody attached to a signal generating compound capable of generating a detectable signal.

18. The kit of claim 17 wherein said at least one monoclonal antibody of (a) is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-303 and 108-394.

19. The kit of claim 17 wherein said antibody of (b) is selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 115B-3-3 and 108-394.

20. A diagnostic reagent comprising at least one monoclonal antibody selected from the group consisting of 120A-270, 115B-151, 117-289, 103-350, 108-394 and 115B-303.

21. An isolated peptide comprising the amino acid sequence of SEQ ID NO:1.

22. An isolated peptide comprising the amino acid sequence of SEQ ID NO:2.

23. An isolated peptide comprising the amino acid sequence of SEQ ID NO:3.

24. An isolated peptide comprising the amino acid sequence of SEQ ID NO:4.

25. An isolated peptide comprising the amino acid sequence of SEQ ID NO:5.

26. An isolated peptide comprising the amino acid sequence of SEQ ID NO:6.

27. A method of detecting 1) one or more antibodies selected from the group consisting of HIV-1 antibody and HIV-2 antibody, and 2) one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing said one or more of said antibodies and one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one HIV-1 antigen which binds to HIV-1 antibody for a time and under conditions sufficient for the formation of HIV-1 antigen/HIV-1 antibody complexes;

b) detecting said HIV-1 antigen/HIV-1 antibody complexes, presence of said complexes

indicating presence of HIV-1 antibody in said test sample;

c) contacting said test sample with at least one HIV-2 antigen which binds to HIV-2 antibody for a time and under conditions sufficient for the formation of HIV-2 antigen/HIV-2 antibody complexes;

d) detecting said HIV-2 antigen/HIV-2 antibody complexes, presence of said complexes indicating presence of HIV-2 antibody in said test sample;

e) contacting said test sample with at least one monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein p24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of antibody/antigen complexes; and

f) detecting said complexes, presence of said complexes indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in said test sample.

28. A method of detecting 1) one or more antibodies selected from the group consisting of HIV-1 antibody and HIV-2 antibody, and 2) one or more antigens selected from the group consisting of HIV-1 antigen and HIV-2 antigen, in a test sample suspected of containing said one or more of said antibodies and one or more of said antigens, comprising the steps of:

a) contacting said test sample with at least one HIV-1 antigen which binds to HIV-1 antibody for a time and under conditions sufficient for the formation of HIV-1 antigen/HIV-1 antibody complexes:

b) adding a conjugate to the resulting HIV-1 antigen/HIV-1 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antibody, wherein said conjugate comprises an antigen attached to a signal generating compound capable of generating a detectable signal;

c) detecting HIV-1 antibody which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of HIV-1 antibody in said test sample;

d) contacting said test sample with at least one HIV-2 antigen which binds to HIV-2 antibody for a time and under conditions sufficient for the formation of HIV-2 antigen/HIV-2 antibody complexes:

e) adding a conjugate to the resulting HIV-2 antigen/HIV-2 antibody complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antibody, wherein said conjugate comprises an antigen attached to a signal generating compound capable of generating a detectable signal;

f) detecting HIV-2 antibody which may be present in said test sample by detecting a signal generated by said signal-generating compound, presence of said signal indicating presence of HIV-2 antibody in said test sample;

g) contacting said test sample with at least one monoclonal antibody which binds to a shared epitope of Human Immunodeficiency Virus-1 protein 24 and Human Immunodeficiency Virus-2 protein p26 for a time and under conditions sufficient for the formation of antibody/antigen complexes;

h) adding a conjugate to the resulting antibody/antigen complexes for a time and under conditions sufficient to allow said conjugate to bind to the bound antigen, wherein said conjugate comprises an antibody attached to a signal generating compound capable of generating a detectable signal; and

i) detecting presence of antigen which may be present in said test sample by detecting a signal generated by said signal generating compound, presence of said signal indicating presence of at least one antigen selected from the group consisting of HIV-1 antigen and HIV-2 antigen in said test sample.